



DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
P.O. BOX 889
SAVANNAH, GEORGIA 31402-0889

JUN 10 2009

Regulatory Division
200800733

JOINT PUBLIC NOTICE
Savannah District/State of Georgia

The Savannah District has received an application for a Department of the Army Permit, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), as follows:

Application Number: 200800733

Applicant: Georgia Ports Authority
Attention: H. Wilson Tillotson, P.E.
Director of Engineering and Maintenance
PO Box 2406
Savannah, Georgia 31402

Agent: Georgia Ports Authority
Attention: Natalie M. Schanze
Environmental Affairs Manager
PO Box 2406
Savannah, Georgia 31402

Location of Proposed Work: The project site is located within the Garden City Terminal of the Georgia Ports Authority, in the southeast corner of the intersection of Grange Road and State Route 25, at latitude 32°08'13.8" north and longitude 81°09'15.9" west, near Garden City, in Chatham County, Georgia.

Description of Work Subject to the Jurisdiction of the US Army Corps of Engineers: To impact 3.53 acres of jurisdictional wetland in order to facilitate the construction of a truck gate that, in conjunction with Gates 3 and 4, would provide the necessary gate capacity to handle the projected 6.5 million twenty-foot equivalent units (TEU) throughput. As proposed, the gate would be comprised of the following elements:

- (1) Inbound security screening area
- (2) Optical character recognition (OCR) portals
- (3) Pre-gate complex and the associated pedestals
- (4) Trouble parking area
- (5) Inbound inspection gate
- (6) Outbound inspection gate
- (7) Radiation portal monitors (RPM)
- (8) Outbound security screening area

In addition, the new gate would improve traffic flow within the Garden City Terminal as well as the external road infrastructure that feeds the terminal. To mitigate for the fill of approximately 3.53 acres of jurisdictional wetland, the applicant has proposed the purchase of 28.32 mitigation credits from Phinizy Swamp Mitigation Bank, a USACE-approved mitigation bank that services the project area.

For additional information, see the attached information supplied by the applicant. The opinions, views and/or conclusions that are expressed by the applicant in this narrative do not necessarily reflect those of the US Army Corps of Engineers.

BACKGROUND

This Joint Public Notice announces a request for authorizations from both the US Army Corps of Engineers and the State of Georgia. The applicant's proposed work may also require local governmental approval.

STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division, intends to certify this project at the end of 30 days in accordance with the provisions of Section 401 of the Clean Water Act, which is required by an applicant for a Federal Permit to conduct an activity in, on, or adjacent to the waters of the State of Georgia. Copies of the application and supporting documents relative to a specific application will be available for review and copying at the office of the Georgia Department of Natural Resources, Environmental Protection Division, Water Protection Branch, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, during regular office hours. A copier machine is available for public use at a charge of 25 cents per page. Any person who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 30 days of the State's receipt of application in writing and state the reasons or basis of objections or request for a hearing. The application can also be seen in the Savannah District US Army Corps of Engineers, Regulatory Branch, 100 West Oglethorpe Avenue, Savannah, Georgia.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia which may be in the form of a license, easement, lease, permit, or other appropriate instrument.

Georgia Coastal Management Program: Prior to the Savannah District Commander making a final permit decision on this application, the project must be certified by the Georgia Department of Natural Resources, Coastal Resources Division, to be consistent with applicable provisions of the State of Georgia Coastal Management Program (15 CFR 930). Anyone wishing to comment on Coastal Management Program certification of this project should submit comments in writing within 30 days of the date of this notice to the Federal Consistency Coordinator, Ecological Services Section, Coastal Resources Division, Georgia Department of Natural Resources, One Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

US ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army Permit.

Cultural Resources Assessment: Review of the latest published version of the National Register of Historic Places indicates that no registered properties or properties listed as eligible for inclusion are located at the site or in the area affected by the proposed work. Presently unknown archeological, scientific, prehistorical, or historical data may be located at the site and could be affected by the proposed work.

Endangered Species: Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), we have determined that the proposed project would have no effect on Federally listed threatened and endangered species. We request that the US Department of the Interior, Fish and Wildlife Service provide concurrence with our effects determination for Federally listed threatened and endangered species. At this time, we also request from the US Department of the Interior, Fish and Wildlife Service and the US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, or any other interested party, information on whether any species listed or proposed for listing may be present in the area.

Public Interest Review: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and in general, the needs and welfare of the people.

Consideration of Public Comments: The US Army Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the US Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Application of Section 404(b)(1) Guidelines: The proposed activity involves the discharge of dredged or fill material into the waters of the United States. The Savannah District's evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act.

Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army Permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer, or his designated appointee, based on the need for additional substantial information necessary in evaluating the proposed project.

Comment Period: Anyone wishing to comment on this application for a Department of the Army Permit should submit comments in writing to the Commander, US Army Corps of Engineers, Savannah District, Attention: Regulatory Division, P.O. Box 889, Savannah, Georgia 31402-0889, no later than 30 days from the date of this notice. Please refer to the applicant's name and the application number in your comments. If you have any questions, please contact Sarah Von Waldner at (912) 652-5523.

Enclosures

1. Supplemental Information (12 pages)
2. Project Drawings (5 pages)

1.0 INTRODUCTION

This application is for a Department of the Army permit under Section 404 of the Clean Water Act, for construction of Gate 8 at the Georgia Ports Authority, Garden City Terminal, Chatham County, Georgia.

This document provides information in support of Georgia Ports Authority's (GPA) permit request. A completed Joint Application for a Department of the Army, Corps of Engineers Permit and Request for Water Quality Certification is included with this document. **THIS VERSION OF THE APPLICATION HAS BEEN CHANGED AS FOLLOWS: THE MITIGATION PLAN HAS BEEN CHANGED.** In the version before this one, a proposed personally-owned vehicles (POV) parking lot was deleted from the proposed project.

1.1 OWNERSHIP/APPLICANT

Georgia Ports Authority (GPA) is mandated to own and operate state port facilities in Georgia. GPA is the sole owner of the subject property. GPA is serving as its own agent for this project. The applicant's contact information is given below.

General Applicant:

Mr. H. Wilson Tillotson, P.E.
Director of Engineering and Maintenance
Georgia Ports Authority
P.O. Box 2406
Savannah, Georgia 31402
(912) 964-3914

Applicant's Agent:

Ms. Natalie M. Schanze
Environmental Affairs Manager
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P.O. Box 2406
Savannah, Georgia 31402
(912) 963-5595

1.2 PLAN OF APPLICATION

This narrative project description is Exhibit A to the Joint Permit Application. The package also includes the Joint Application form (issued by the Savannah Army Engineer District) for: a Department of the Army, Corps of Engineers Permit and Request for Water Quality Certification. This application has also been expanded with supporting documents that detail the studies that were conducted and referenced throughout the project narrative. This inclusive permit application contains the following sections:

- USACE Joint Permit Application Form
- Exhibit A: Permit Application Drawings
- Exhibit B: Draft Jurisdictional Determination
- Exhibit C: Alternatives Drawings
- Exhibit D: Mitigation Worksheet

1.3 LOCATION

The project site is GPA's Garden City Terminal. A Vicinity Map and a Location Map are provided in Exhibit A (the application drawings section of this document) and illustrates the location of the Garden City Terminal relative to the Savannah River.

1.4 PURPOSE AND NEED

Garden City Terminal is a secured, dedicated container terminal owned and operated by the Georgia Ports Authority. Garden City Terminal is the fourth-largest container port in the United States and the largest single-terminal operation in North America that encompasses approximately 1,100 acres of land.

The facility's single-terminal design allows the port to operate in an environment of maximum efficiency and flexibility, as well as increased security, due to the concentration of all manpower, technology and equipment in one centralized container operation. Add to this a pro-business, pro-port state versed in the unique requirements of international trade and investment, as well as an experienced labor force from one of the top-six fastest growing populations in the nation, and the opportunities offered by Garden City Terminal are unequaled among U.S. ports.

Container growth at the Garden City Terminal is projected to nearly triple over the next twenty years with the overall volume of containers moving through the facility anticipated to be 6.5M TEUs (Twenty-foot Equivalent Units). The growth in containerized trade will directly increase the number of trucks that call on the facility. The Garden City Terminal currently handles over 4,200 trucks per day and that number is expected to increase to approximately 13,500 trucks in the next fifteen years. To support this growth, the Georgia Ports Authority must make certain infrastructure improvements to maintain productivity. In addition to more efficient truck traffic management through the gates, other considerations such as parking areas and initiatives to reduce on terminal traffic must be addressed. The GPA is strategically focused on developing the facilities needed to efficiently and effectively handle the increased container traffic and the resulting increase in trucks and other vehicles that are needed.

Currently, there are two truck gates (Gate #3 on Brampton Road and Gate #4 at the intersection of State Route 25 and State Route 307) that handle all of the truck traffic into the facility. Both of those gates are near the maximum volume of trucks that can actually be processed on a daily basis. Therefore, a new gate is needed to (1) provide the ability to handle the projected truck traffic and (2) improve traffic flow both internal to the Garden City Terminal as well as to distribute truck traffic on the local surface road infrastructure that feeds the terminal. Overall traffic flow throughout the terminal and adjacent to the terminal is of paramount importance to ensuring that operations are efficient.

2.0 DESCRIPTION OF THE PROJECT

This project will install a new truck gate at the northern end of the Garden City Terminal at the intersection of Grange Road and State Route 25. In addition to the installation of this truck gate and parking, the Georgia Ports Authority is developing a strategy for technological improvements for all three of the gates (Gate #3, Gate #4 and proposed Gate #8) in order to streamline the processing of the trucks as efficiently as possible. There are several considerations that must be addressed in establishing the layout of a gate. The most important element is ensuring that there is satisfactory queuing space to allow the trucks to enter and exit the facility. The overall layout must also follow general guidelines for truck turning requirements, acceleration and deceleration, and overall design speed. The layout of the gate is optimized to provide a suitable number of lanes for truck operations and to reduce traffic congestion.

The work is presently anticipated to start as soon as possible, preferably within the next four months, and will extend through approximately 12 - 24 months' work effort.

3.0 RESOURCES - LOCATIONS AND IMPACTS

3.1 WATERS OF THE U.S.: DRAFT JURISDICTIONAL DETERMINATION

Exhibit B of this supporting document provides the draft jurisdictional determination (JD); the JD was not finalized due to current Corps policy that was in force at the time of the original permit application submittal.

There are three wetland areas within the 30-acre site of the proposed Gate #8. The wetlands are 0.56 acre, 8.9 acres [part of a larger wetland which was verified as to jurisdiction on a previous project], and a lobed, broken-up 5.52 acre wetland. The three wetland areas are vegetatively homogenous. Dominant species are red bay, Chinese tallow-tree, red maple, sweetgum, wax myrtle, buttonbush, Virginia chain fern, sedges, Blackstem fern, beakrush, pennywort, and smartweed. Interior portion of the wetlands were ponded to varying degrees.

The 0.56 acre wetland is transected by a road. The 5.52 acre wetland has been disrupted due to the two major truck roadways that intersect here, causing ponding in this area. This wetland is lobed and is cut by a number of ditches and berms. At the time of field inspection, this wetland was very ponded due to beaver activity. There is a grassed road that transects the northern-most lobe. Parallel to that road, there is a strip of upland that not quite transects another lobe; the consultant was not sure whether this is a manmade or natural feature.

3.2 OTHER RESOURCES

A cultural resources survey was performed on the larger site for the CB-8 project. No known cultural, historical, or archaeological resources were found or are expected to occur within the project area.

There were no listed plant or animal species, or their sign, identified during field inspection. No critical habitat exists on the proposed project site.

3.3 ALTERNATIVES ANALYSIS

3.3.1 Background

Garden City Terminal is a secured, dedicated container terminal owned and operated by the Georgia Ports Authority and is the fourth-largest container port in the United States and the largest single-terminal operation in North America. The facility's single-terminal design allows the port to operate in an environment of maximum efficiency and flexibility, as well as increased security, due to the concentration of all manpower, technology and equipment in one consolidated operation. Add to this a pro-business, pro-port state versed in the unique requirements of international trade and investment, as well as an experienced labor force from one of the top-six fastest growing populations in the nation, and the opportunities offered by Garden City Terminal are unequaled among U.S. ports.

Container growth at the Garden City Terminal is projected to nearly triple over the next twenty years with the overall volume of containers moving through the facility anticipated to be 6.5M TEUs (Twenty-foot Equivalent Units). The growth in containerized trade will increase the number of trucks that call at the facility. The Garden City Terminal currently handles over 4,200 trucks per day and that number is anticipated to increase to approximately 13,500 trucks in the next fifteen years. The Georgia Ports Authority must make infrastructure and productivity improvements in order to handle the forecasted volume. A key element is the access and departure of trucks draying the containers. The critical terminal facility that processes the trucks is the truck gates that are required for the interchanging of the containers.

Currently, there are two truck gates (Gate #3 on Brampton Road and Gate #4 on State Route 307) that handle all of the truck traffic into the facility. Both of those gates are nearing the maximum volume of trucks that can practically be processed on a daily basis. Therefore, a new gate is needed to (1) provide the ability to handle the projected truck traffic and (2) improve traffic flow both internal to the Garden City Terminal and the external road infrastructure that feeds the terminal. Overall traffic flow throughout the terminal and adjacent to the terminal is of paramount importance to ensuring that operations are efficient without severely disrupting surface transportation in the surrounding community.

This project will develop a new truck gate at the Garden City Terminal. The gate is strategically planned to provide the necessary gate capacity for the Garden City Terminal to handle the projected throughput utilizing the existing Gates 3 and 4 in combination with the new Gate 8. The three gates, working concurrently, will provide the gate infrastructure to handle the projected 6.5M TEU throughput. In addition to the installation of this new gate, the Georgia Ports Authority is developing a strategy for technological improvements for all

three of the proposed gates (Gate #3, Gate #4 and Gate #8) in order to streamline the processing of the trucks as efficiently as possible.

The project site is approximately 23 acres and will be comprised of the following elements:

1. **Inbound Security Screening Area** – this element is a screening of inbound trucks to ensure that the truck and occupants do not gain unescorted access to secure areas of the nation's maritime transportation system or in this case the GPA Garden City Terminal. This element of the facility will involve installation of a pre-engineered metal canopy over a three-lane facility with three pre-fabricated guard booths to protect security personnel from adverse weather conditions. Work shall include the installation of the foundations for the canopy and guard booths, utility infrastructure (lights, fiber optics, telephone, etc.) and pavement markings.
2. **Optical Character Recognition (OCR) Portals** – the GPA is taking advantage of state-of-the-art technological advances in the overall processing of inbound trucks. The use of OCR equipment to capture container and chassis numbers streamlines the inbound process by pre-populating the captured data into the Pre-Gate Complex and Pedestals. The cameras used to photograph and OCR scanners are typically mounted on a portal frame assembly. This element of the facility will involve installation of a three-lane wide portal frame to support cameras and OCR scanners regarding inbound trucks. Work shall include the installation of the foundations for the self-supporting portal frame, all cameras and scanners, and the electrical and fiber optic infrastructure to support the equipment as well as pavement markings.
3. **Pre-Gate Complex and Pedestals** – All trucks entering the facility will pass through the pre-gate pedestals. Therefore, this element requires a significant amount of truck queuing area as well as the pedestals. The pedestals include an intercom speaker and ticket printer for interaction between the truck driver and the clerk. In some cases a truck and occupants will need to resolve problems by being directed to a Trouble Parking Area which will allow the occupant to make contact with the resolving authorities (i.e. trucking company, etc.). This element of the facility will involve the installation of the components associated with a fifteen (15) lane Pre-Gate Complex. Work includes installation of above ground truck scales, supporting pedestals, printers and other technology associated with the Pre-Gate process. All utility infrastructure shall be installed including electrical power, fiber optic, telephone, etc.) and pavement markings.
4. **Trouble Parking** – Occasionally, an inbound truck will have a problem develop regarding the transaction that needs to take place at the gate. This is normally handled by having the truck pull out to an area that allows the driver to call their dispatch in order to get directions and/or solve the issue. This element of the facility will involve installation of the parking for upwards of three (3) trucks with a kiosk and associated utilities (electrical, telephone, etc.).
5. **Inbound Inspection Gate** – After being processed at the Pre-Gate Complex and Pedestals the truck will proceed to the Inbound Inspection Gate where inspection staff will conduct the interchange of the container onto the facility. This element of the facility will involve installation of a pre-engineered metal canopy over a fifteen (15) lane facility with pre-fabricated booths in each lane to facilitate the inbound interchange process and inspection as well as protect personnel from adverse weather conditions. Work shall include the installation of the foundations for the canopy and guard booths, utility infrastructure (lights, fiber optics, telephone, etc.) and pavement markings.
6. **Outbound Inspection Gate** – A truck commencing with the departure evolution will start by being processed at the Outbound Inspection Gate where inspection staff will conduct the interchange of the container out of the facility. This element of the facility will involve

installation of a pre-engineered metal canopy over a ten (10) lane facility with pre-fabricated booths in each lane to facilitate the inbound interchange process and inspection as well as protect personnel from adverse weather conditions. Work shall include the installation of the foundations for the canopy and guard booths, utility infrastructure (lights, fiber optics, telephone, etc.) and pavement markings.

7. **Radiation Portal Monitors (RPM)** – this element is a requirement of the Department of Homeland Security (USDHS) program through the U.S. Customs & Border Protection Department (CBP). It is a detection device that provides CBP with a passive, non-intrusive means to screen trucks and other conveyances for the presence of nuclear and radiological materials. These systems are capable of detecting various types of radiation emanating from nuclear devices, dirty bombs, special nuclear materials, natural sources, and isotopes commonly used in medicine and industry. CBP is installing these radiation portal monitors nationwide - at seaports, land border ports of entry and crossings, including rail crossings, international airports, and international mail and express consignment courier facilities in an effort to screen 100 percent of all incoming goods, people, and conveyances for radiation. This element of the facility will involve installation of two primary RPMs, including foundations, utility infrastructure (electrical, fiber optic, etc.) and pavement markings. Additionally, a secondary RPM will be installed with a canopy for CBP to complete an in-depth inspection of any containers and trucks that alarm the primary RPM.
8. **Outbound Security Screening Area** - this element is a screening of outbound trucks to ensure that the truck and occupants are exiting the facility with the correct items (i.e. container). This element of the facility will involve installation of a pre-engineered metal canopy over a two-lane facility with two pre-fabricated guard booths to protect security personnel from adverse weather conditions. Work shall include the installation of the foundations for the canopy and guard booths, utility infrastructure (lights, fiber optics, telephone, etc.) and pavement markings.

3.3.2 Avoidance and Minimization

The gates at a container terminal are one of three critical pieces of infrastructure that dictate the efficiency and effectiveness of the terminal to move containers. The other two are the berths and the container yard for storage. If the gate is not sized properly and configured for effective and efficient operation then it becomes a “choke point”, or area of congestion and delay, in the overall movement of the containers.

The methodology utilized by the GPA to design the overall configuration of Gate 8 is based on providing a gate capacity (for all three gates at the facility) so that the throughput corresponds to the traffic that a gate can process so that at the peak hour of the peak day of the peak month, there will be small likelihood of exceeding the space provided for the trucks to queue in front of each stage. Furthermore, the average waiting time of the trucks at the gates at capacity should not exceed 30 minutes. The design methodology incorporates a variety of different parameters including daily traffic projections, hourly arrival patterns, number of working hours, number of lanes, buffer size per lane, service time, effective service rate, number of workers, expected queue size, and probabilistic statistics.

Planning calculations have shown that during peak days at the facility there will be a total of approximately 8,300 trucks arriving daily at the Garden City Terminal gates to interchange containers. The number of trucks that are anticipated to utilize Gate 8 is approximately 40% (3,600 per day). The different elements of the gate (described in the Introduction) require that the overall layout of the gate facility needs to be such that the queuing of the trucks is minimized, while yet balancing the overall volume of trucks that are processed so that the other aspects of the terminal are not overwhelmed and the 6.5M TEUs is achieved in a reasonable fashion. The gate modeling completed shows that the following lanes and queuing space is needed to achieve the overall goals.

Table 1 – Gate 8 Queuing Requirements Analysis

	Facility Element	Lane Requirements (No. of Lanes)	Queue Size (No. of Trucks/Lane)
<i>Inbound</i>	Inbound Security Screening	2	2
	OCR Portals	2	5
	In-Bound Pedestals	15	5
	Trouble Parking	3	1
	In-Bound Gate	15	5
<i>Out-Bound</i>	Out-Bound Gate	10	96
	Radiation Portal Monitors	2	4
	Secondary RPM	1	5
	Outbound Security Screening	2	7

The overall location of the proposed Gate 8 is near Grange Road on the northern portion of the existing Georgia Ports Authority's Garden City Terminal. This location is needed to provide separation of vehicular traffic between the three gates and takes advantage of the external roads that exist and/or are proposed in the near future. Gate 3 is on the south end of the terminal off of Brampton Road, while Gate 4 is at the mid-point of the terminal at the intersection of SR307 and SR25. The location of Grange Road will facilitate the effective movement of trucks from the primary access routes to the northern end of the terminal. Two physical constraints were provided regarding the layout that needed to be handled. The first is the presence of a high-voltage transmission line easement and substation located adjacent to Grange Road. This facility is owned by Georgia Power and the easement provides the high voltage electrical distribution for the Garden City Terminal. There is a restriction that no structures can be placed inside the easement due to the presence of the high-voltage lines. The second restriction is the presence of three different freshwater wetlands on the project site. The first is located on the northeast end of the project site with an overall size of 0.56-acres; the

second is at the northwest corner of the project site with a size of 5.52-acres; and the third is on the south edge of the proposed location for Gate 8 and is 8.9-acres in size.

A series of alternatives were developed regarding Gate 8 to provide a suitable layout of the different required elements as mentioned above. Drawings are provided in Exhibit C.

- A. Alternative 1 - The first alternative, designated Alternative 1 and shown on the attached drawings, places the facilities directly adjacent to Grange Road and attempts to minimize the overall footprint in order to conserve as much property as possible for other uses (Offsite POV parking, container storage, etc.). The immediate concern that is visible is the lack of queuing space for the anticipated trucks, especially regarding the In-Bound Pedestals and the Out-Bound Gate. Particular concern is the amount of space between the Outbound Gate and the Outbound Security Screening area. Additionally, the location of the RPM facilities on the interior of the terminal creates a potential chokepoint for outbound trucks. A total of approximately 2.13-acres of the freshwater wetlands are impacted by this alternative.
- B. Alternative 2 - The second alternative, designated Alternative 2 and shown on the drawings, focuses on providing the different queuing space required and providing all of the required ancillary facilities. This alternative meets the need and purpose of the project by providing the different gate elements as well as the truck operational requirements. The overall impact to the wetlands (6.32 acres) became a concern and is certainly the biggest disadvantage to this alternative.
- C. Alternative 3 – The third alternative, shown on the drawings, focuses on attempting to minimize the impact to the wetlands by moving the Inbound Pedestals and Inbound Gate structure to the north and decreasing the area of land between the Grange Road facilities and the gate. The result is that the wetland impact is reduced to 3.41-acres. However, the alternative also reduces the overall amount of queue that is available on the inbound side, but the space provided is ample. A more significant concern was raised regarding the amount of space provided for the outbound queue which is not adequate and will result in trucks obstructing the outbound gate area.

- D. Alternative 4 – The fourth alternative, shown on the drawings and the preferred layout, provides ample inbound and outbound queue size by shifting the access way to the Outbound Gate to the north near Grange Road, but on the terminal. The result is that the wetland impact is 3.53-acres.

3.3.3 Conclusions

The Alternatives Analysis led to the recommendation that Alternative 4 be selected as the preferred layout for Gate 8 and the ancillary facilities. It meets the needs and purpose of the project, while minimizing the impacts to the wetlands.

Impacts to Waters of the U.S. will be minimized by implementation of stormwater best management practices. Also, this site will be incorporated into the Garden City Terminal stormwater management plan. Erosion and sedimentation control measures will be fully employed during construction.

3.4 MINIMIZATION AND AVOIDANCE

The preferred alternative allows complete avoidance of the 8.9 acre wetland and avoidance of almost half of the 5.52 acre wetland.

3.5 UNAVOIDABLE IMPACTS

Due to engineering criteria and an already physically constrained site, due to the existing adjacent roadways, impacts to some onsite wetlands are unavoidable. Unavoidable impacts total $0.56 + 2.97 = 3.53$ acres.

3.6 PROPOSED COMPENSATORY MITIGATION

GPA proposes to mitigate the unavoidable wetland impacts by purchasing credits from Phinizy Swamp, an approved, appropriate mitigation bank.

4.0 PROPOSED MITIGATION FOR UNAVOIDABLE IMPACTS

GPA proposes to mitigate the unavoidable wetland impacts by purchasing credits from an approved, appropriate mitigation bank.

CALCULATION OF CREDITS

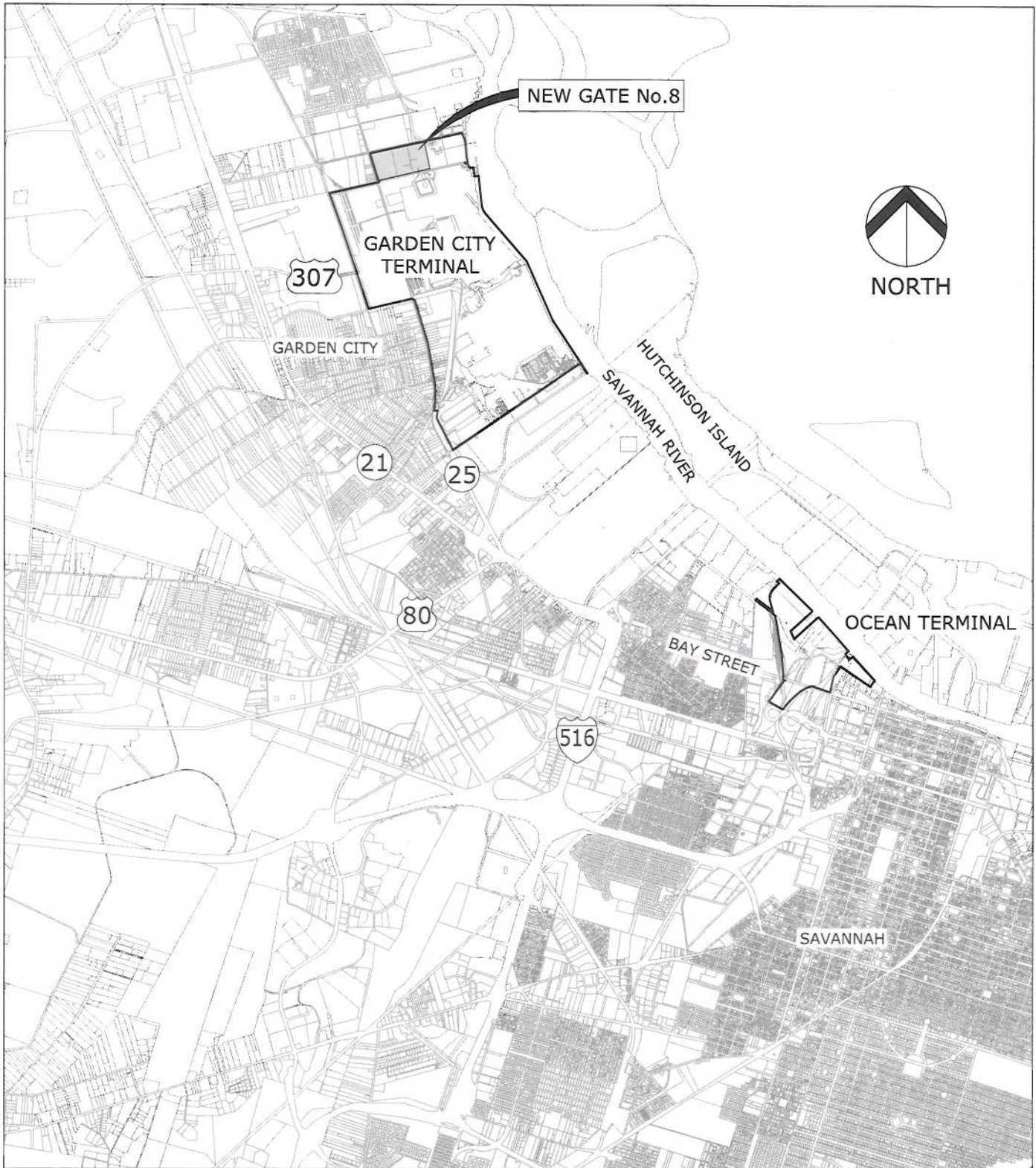
Proposed compensatory mitigation was calculated using the Savannah District's SOP. The worksheet is given herein as Exhibit D.

Adverse Impact Factors:

- ☐ Dominant Effect: the entire area is proposed to be paved, so effect is Fill, impact factor 2.0.
- ☐ Duration of Effects: 7+ years, impact factor 2.0.
- ☐ Existing Condition: all three wetlands are hydrologically altered to some degree, but the larger wetland less so. Therefore, the larger wetland is Class 2, with an impact factor of 1.5, while the smaller wetlands are Class 3, with an impact factor of 1.0.
- ☐ Lost Kind: Kind B, non-riverine forested wetlands; impact factor 1.5.
- ☐ Preventability: Considered as Moderate, because the Garden City Terminal is an existing facility and there is no feasible other location for the much-needed, proposed gate. Also, the site itself is very constraining in size and shape; the engineers were hard-pressed to get the needed gate elements within this space. Impact factor of 1.0.
- ☐ Rarity ranking: common, impact factor of 0.1.

Sum of r Factors and calculated mitigation credits required:

- ☐ Smaller wetlands: $R1 = 7.6$; $AA = 0.56$; mitigation credits = 4.26
- ☐ Larger wetland: $R2 = 8.1$; $AA = 2.97$; mitigation credits = 24.06
- ☐ Total mitigation credits required: 28.32



PURPOSE: NEW TRUCK GATE

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:
SAVANNAH FOODS & INDUSTRIES
CHATHAM COUNTY, GA D.O.T.
TOWN OF PORT WENTWORTH

VICINITY MAP



NOT TO SCALE

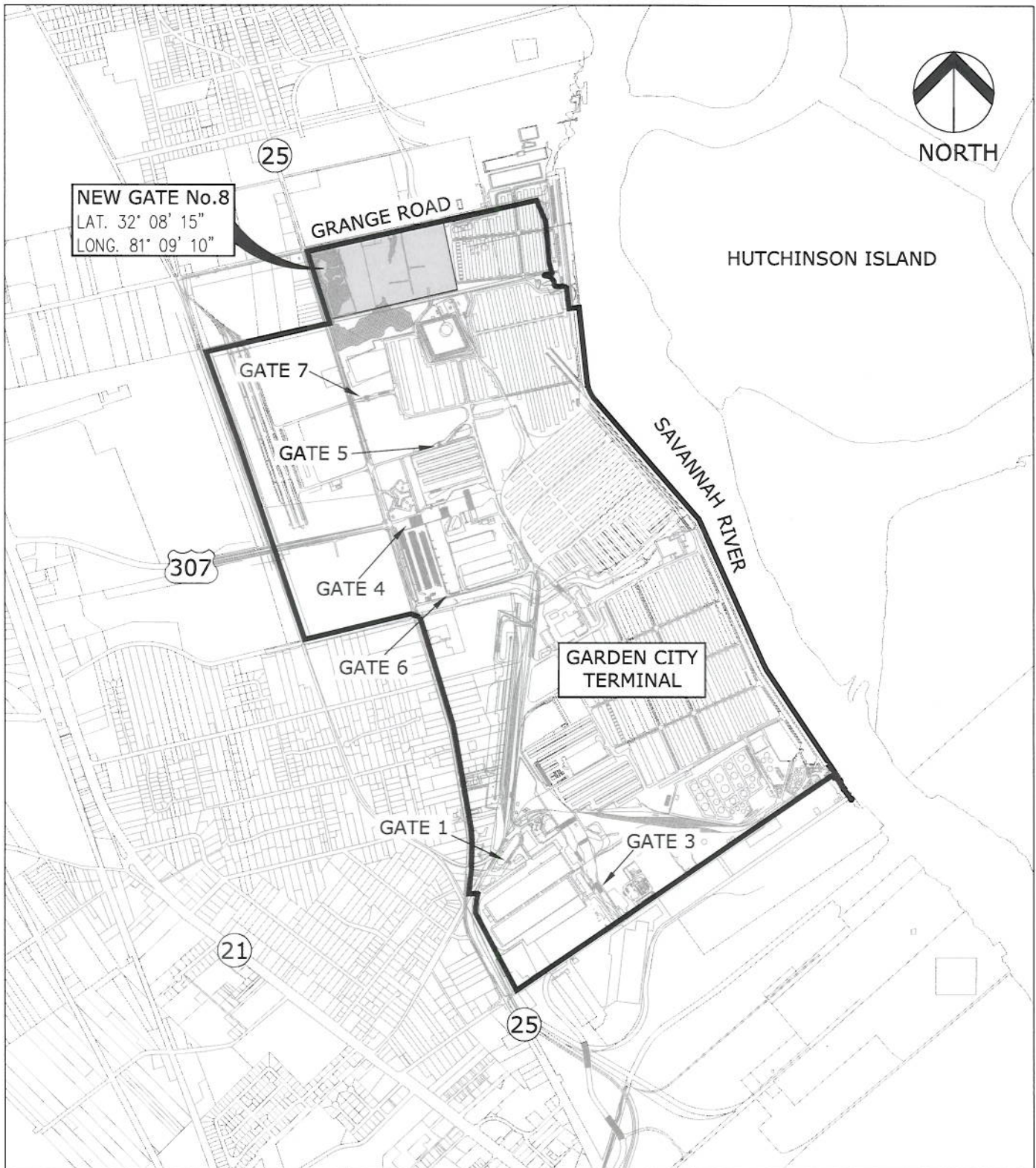
GEORGIA PORTS AUTHORITY
P.O. BOX 2406
SAVANNAH, GA 31402

NEW GATE No. 8

APPLICATION BY:
GEORGIA PORTS AUTHORITY

SHEET 1 OF 4

DATE: 2/16/09



PURPOSE: NEW TRUCK GATE

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:
SAVANNAH FOODS & INDUSTRIES
CHATHAM COUNTY, GA D.O.T.
TOWN OF PORT WENTWORTH

LOCATION MAP

0 2000' 4000'

1" = 2000'

GEORGIA PORTS AUTHORITY
P.O. BOX 2406
SAVANNAH, GA 31402

NEW GATE No.8

APPLICATION BY:
GEORGIA PORTS AUTHORITY

SHEET 2 OF 4

DATE: 2/16/09



NORTH

GRANGE ROAD

EXISTING GEORGIA POWER
GRANGE ROAD SUBSTATION

EXISTING GEORGIA POWER
WHITE HALL SUBSTATION

EXISTING WETLAND
0.56 ACRES

EXISTING FIELD OFFICE

EXISTING OVERHEAD
TRANSMISSION LINES

EXISTING WETLAND
8.90 ACRES

EXISTING
TOWER, TYP

EXISTING WETLAND
5.52 ACRES

NORFOLK SOUTHERN R/R EASEMENT

GA SR 25

EXISTING BERM

LEGEND

 EXISTING WETLANDS

PURPOSE: NEW TRUCK GATE

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:
SAVANNAH FOODS & INDUSTRIES
CHATHAM COUNTY, GA D.O.T.
TOWN OF PORT WENTWORTH

EXISTING SITE PLAN

0 300' 600'

1" = 300'

GEORGIA PORTS AUTHORITY
P.O. BOX 2406
SAVANNAH, GA 31402

NEW GATE No.8

APPLICATION BY:
GEORGIA PORTS AUTHORITY

SHEET 3 OF 4

DATE: 2/16/09



NORTH

GRANGE ROAD

GA SR 25

AREA	WETLAND IMPACT (ACRES)
A	0.56
B	2.97
TOTAL	3.53

LEGEND

 EXISTING WETLANDS

PURPOSE: NEW TRUCK GATE

DATUM: MEAN LOW WATER

ADJACENT PROPERTY OWNERS:
SAVANNAH FOODS & INDUSTRIES
CHATHAM COUNTY, GA D.O.T.
TOWN OF PORT WENTWORTH

PROPOSED SITE PLAN

0 300' 600'

1" = 300'

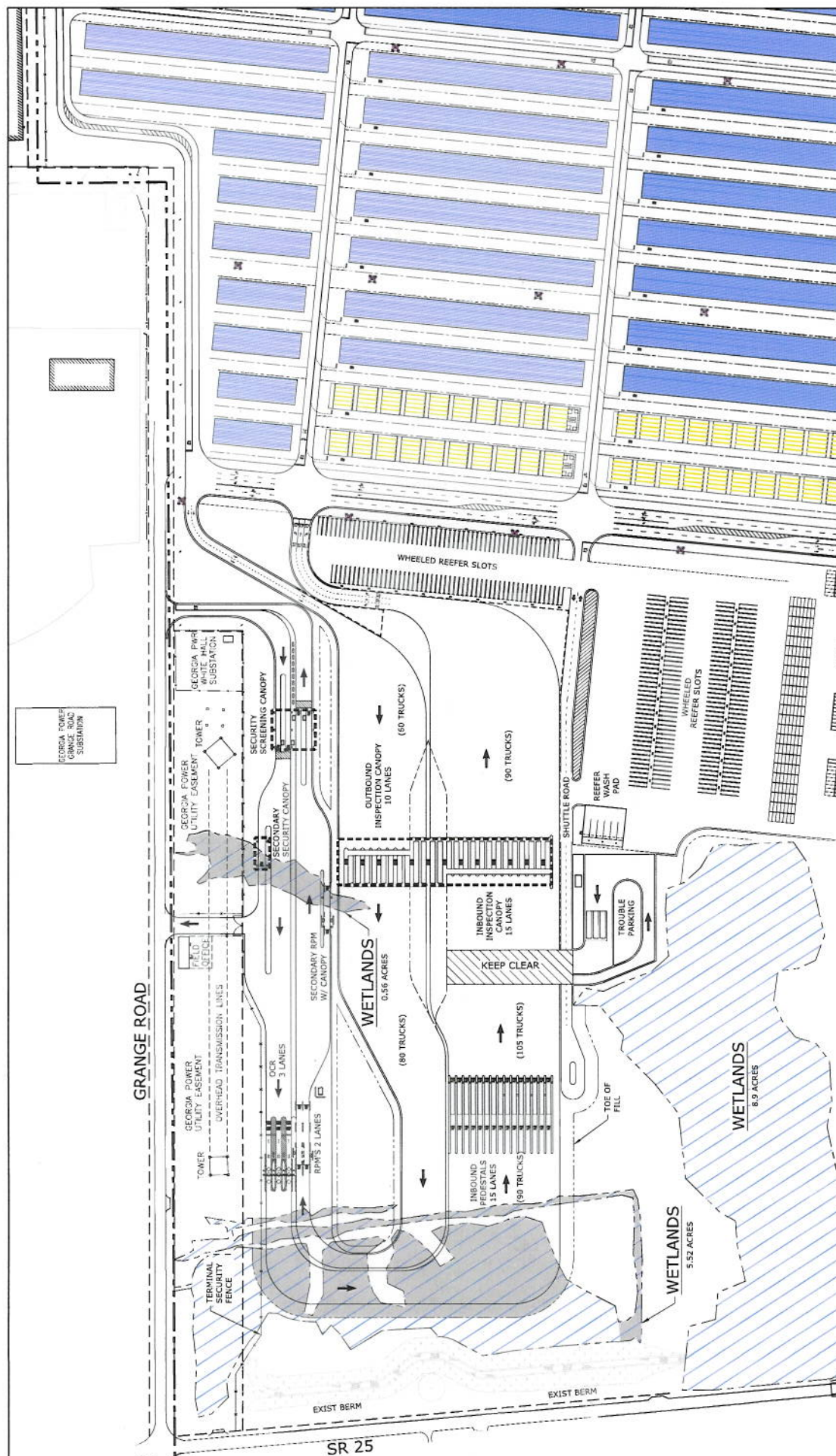
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SHEET 4 OF 4

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**GEORGIA PORTS AUTHORITY
GARDEN CITY TERMINAL
GATE 8 - ALTERNATIVE 4**

